Atty Dkt. No.: SHIM-013 USSN: 09/937,495

AMENDMENTS TO THE CLAIMS:

1.-14. (canceled)

15. (Currently Amended) A method of producing a monoclonal antibody, comprising the steps of:

fusing a B cell of a transgenic mouse with an immortal a myeloma cell line to obtain a hybridoma, wherein the hybridoma comprises a rearranged immunoglobulin heavy chain nucleotide sequence which expresses a heavy chain polypeptide, and a rearranged immunoglobulin light chain nucleotide sequence which expresses a light chain polypeptide;

introducing into the hybridoma an exogenous nucleotide sequence which encodes a heavy chain polypeptide identical to the heavy chain polypeptide expressed by the endogenous immunoglobulin heavy chain to thereby obtain a transformant hybridoma transformed with the exogenous nucleotide sequence;

culturing the transformant in a cell culture medium; and obtaining a monoclonal antibody produced by the transformant.

- 16. (Previously Presented) The method of claim 15, wherein the nucleotide sequence encoding the immunoglobulin heavy chain has an identical nucleotide sequence to the exogenous nucleotide sequence introduced into the hybridoma.
 - 17. (Canceled)
- 18. (Currently Amended) The method of claim 47 15, wherein the myeloma cell line is a recombinant myeloma cell line.
- 19. (Previously Presented) The method of claim 15, wherein the rearranged immunoglobulin heavy chain nucleotide sequence comprises a human sequence.
- 20. (Previously Presented) The method of claim 15, wherein the rearranged immunoglobulin light chain nucleotide sequence comprises a human sequence.

Atty Dkt. No.: SHIM-013 USSN: 09/937,495

21. (Previously Presented) The method of claim 15, wherein the exogenous sequence further comprises a gene-amplification gene.

- 22. (Previously Presented) The method of claim 21, wherein the gene-amplification gene is dihydrofolate reductase (DHFR) gene.
- 23. (Currently Amended) A transformant produced by a method comprising the steps of: fusing a B cell of a transgenic mouse with an immortal a myeloma cell line to obtain a hybridoma, wherein the hybridoma comprises a rearranged immunoglobulin heavy chain nucleotide sequence which expresses a heavy chain polypeptide, and a rearranged immunoglobulin light chain nucleotide sequence which expresses a light chain polypeptide;

introducing into the hybridoma an exogenous nucleotide sequence which encodes a heavy chain polypeptide identical to the heavy chain polypeptide expressed by the endogenous immunoglobulin heavy chain to thereby obtain a transformant hybridoma transformed with the exogenous nucleotide sequence;

culturing the transformant in a cell culture medium; and obtaining a transformant.